CLAIMS

What is claimed is:

1        1.    A method comprising:

2        analyzing database access statements issued for an application in use;

3        determining accessed items and types of access for the application based on the

4        issued database access statements for the application; and

5        developing a role associated with the application based on the determined accessed

6        items and types of access, wherein the role may be used to allow a user database access when

7        associated with the application.


1        2.    The method of claim 1 wherein analyzing the issued database access

2        statements comprises:

3        capturing the database access statements;

4        normalizing the database access statements; and

5        eliminating redundancies in the database access statements.


1        3.    The method of claim 2 wherein the database access statements comprise

2        Structured Query Language (SQL) queries.


1        4.    The method of claim 1 wherein the determined accessed items and types of

2        access include objects accessed and operations performed on the objects.


1        5.    The method of claim 1 wherein developing a role comprises determining

2        permissions for the application based on the determined accessed items and types of access.


1        6.    The method of claim 1 further comprising determining which of a set of users

2        are authorized to use the application.


1        7.    The method of claim 1 further comprising:

2        detecting a user request to establish an application session;

3        finding the role associated with the application; and

4    assigning the role to a user.


1    8.    The method of claim 7 wherein detecting a user request to establish an

2    application session comprises determining if a user is authorized to use the application.


1    9.    The method of claim 7 further comprising:

2    detecting an end of the application session; and

3    if an end of the application session is detected, disabling the assigned role for the

4    user.

1      10.    An article comprising a machine-readable medium storing instructions

2 operable to cause one or more machines to perform operations comprising:

3         analyzing database access statements issued for an application in use;

4         determining accessed items and types of access for the application based on the

5 issued database access statements for the application; and

6         developing a role associated with the application based on the determined accessed

7 items and types of access, wherein the role may be used to allow a user database access when

8 associated the application.

1      11.    The article of claim 10, wherein analyzing the issued database access

2 statements comprises:

3         determining whether the database access statements have been captured;

4         normalizing the database access statements; and

5         eliminating redundancies in the database access statements.

1      12.    The article of claim 10 wherein the determined accessed items and types of

2 access include objects accessed and operations performed on the objects.

1      13.    The article of claim 10 wherein developing a role comprises determining

2 permissions for the application based on the determined accessed items and types of access.

1      14.    The article of claim 10 wherein the instructions are further operable to cause

2 one or more machines to perform operations comprising determining which of a set of users

3 are authorized to use the application.

1      15.    The article of claim 10 wherein the instructions are further operable to cause

2 one or more machines to perform operations comprising:

3         determining whether a user request to establish an application session has been

4 detected;

5         finding the role associated with the application; and

6         assigning the role to a user.

1        16.    The article of claim 15 wherein detecting a user request to establish an

2    application session comprises determining if a user is authorized to use the application.


1        17.    The article of claim 15 wherein the instructions are further operable to cause

2    one or more machines to perform operations comprising:

3            detecting an end of the application session; and

4            if an end of the application session is detected, disabling the assigned role for the

5    user.

1    18.    A database security analyzer comprising:

2    a communication interface operable to receive database access statements issued for

3    an application in use;

4    a memory operable to store the issued database access statements; and

5    a processor operable to develop a role associated with the application based on the

6    issued database access statements for the application, wherein the role may be used to allow a

7    user database access when using the application.


1    19.    The analyzer of claim 18 wherein developing a role comprises:

2    determining accessed items and types of access for an application based on the issued

3    database access statements for the application;

4    determining permissions for the application based on the determined accessed items

5    and types of access; and

6    developing a role associated with the application based on the determined

7    permissions.


1    20.    The analyzer of claim 19 wherein the determined accessed items and types of

2    access include objects accessed and operations performed on the objects.


1    21.    The analyzer of claim 18 wherein developing a role comprises:

2    determining whether issued database access statements have been captured;

3    normalizing the database access statements; and

4    eliminating redundancies in the database access statements.


1    22.    The analyzer of claim 18 wherein the memory comprises instructions, and the

2    processor operates according to the instructions.

1      23.    A method comprising:

2      capturing the database access statements issued for one or more applications in use,

3 wherein the database access statements comprise Structured Query Language (SQL) queries;

4      normalizing the issued database access statements;

5      eliminating redundancies in the normalized database access statements;

6      determining accessed items and types of access for an application based on the issued

7 database access statements for the application, wherein the determined accessed items and

8 types of access include objects accessed and operations performed on the objects;

9      determining permissions for the application based on the accessed items and types of

10 access;

11      developing a role associated with the application based on the developed permissions;

12      determining which of a set of users are authorized to use the application;

13      detecting a user request to establish a session of the application;

14      determining if the user is authorized to use the application;

15      if the user is authorized to use the application, finding the role associated with the

16 application;

17      assigning the role to the user;

18      detecting an end of the application session; and

19      if an end of the application session is detected, disabling the assigned role for the

20 user.